

FIG. 1

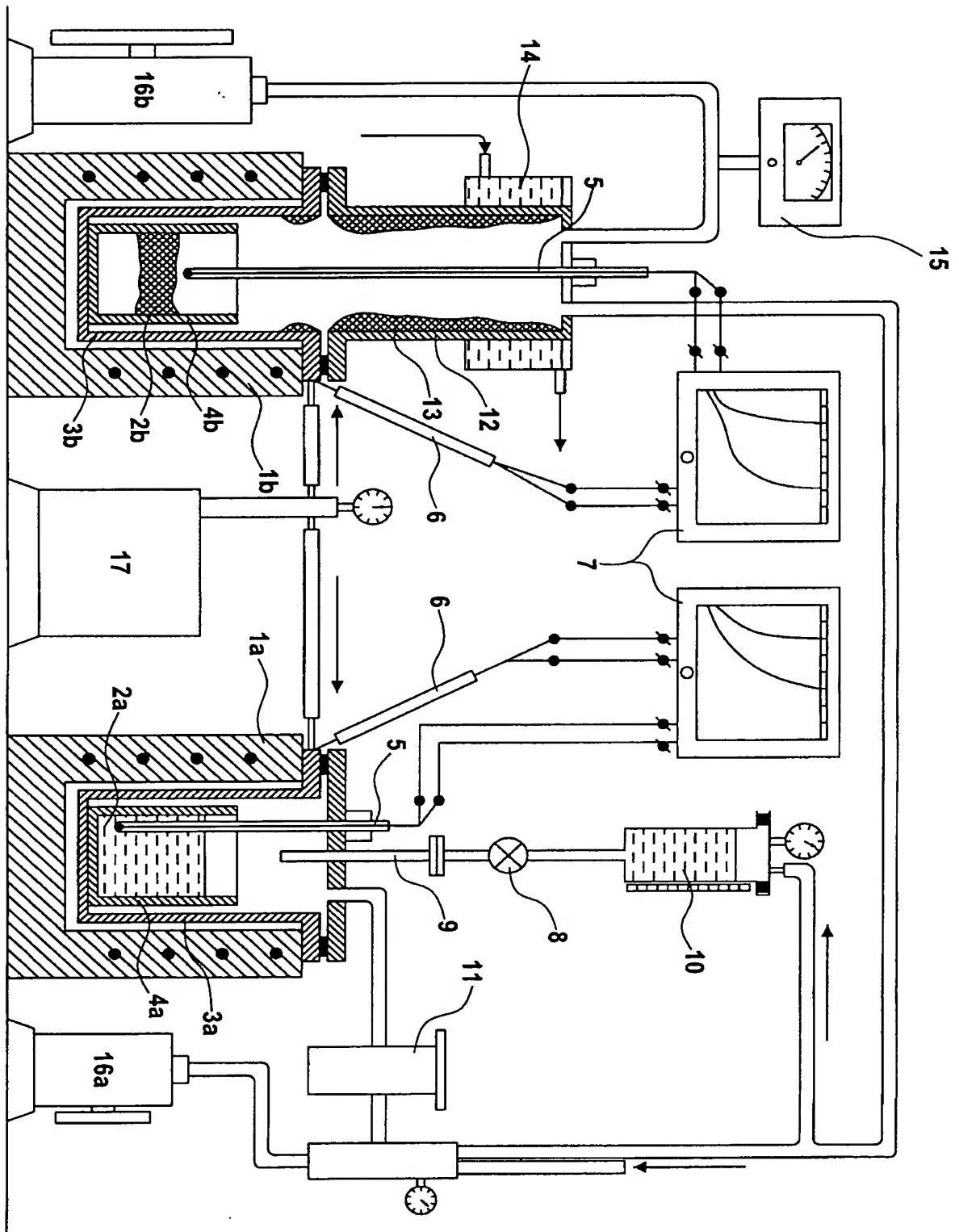


FIG. 2

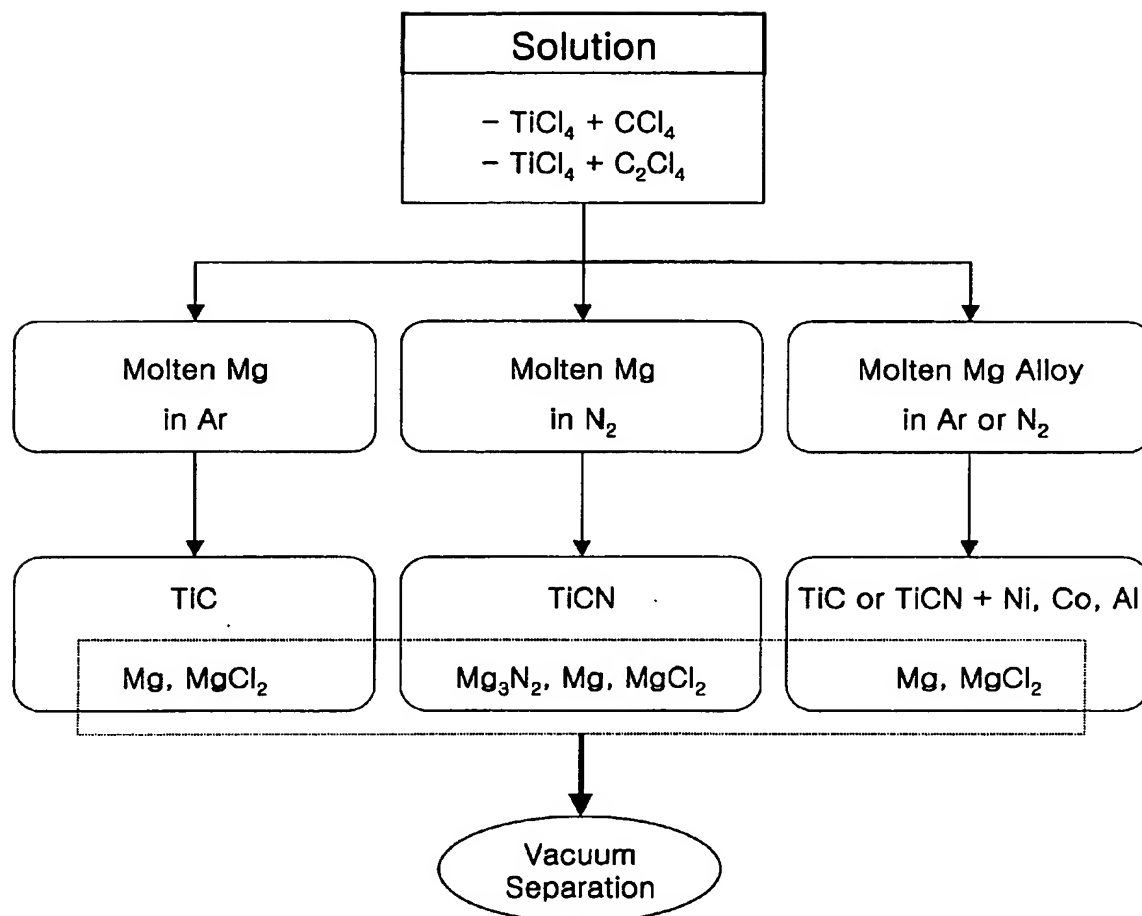


FIG. 3A

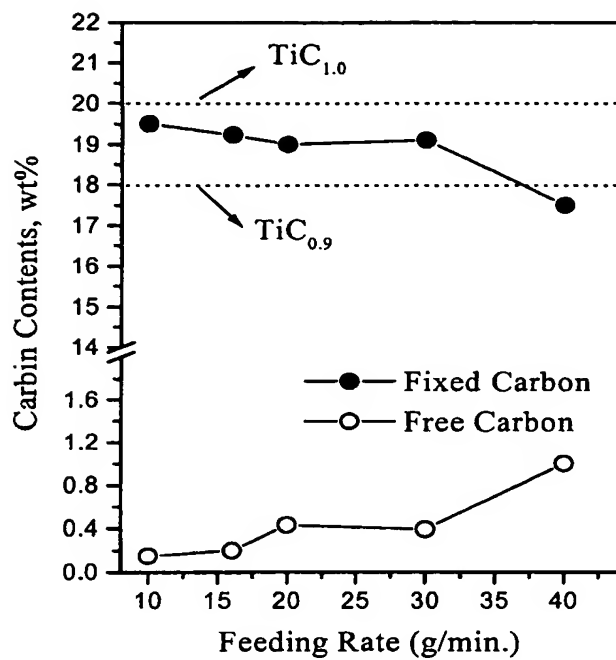


FIG. 3B

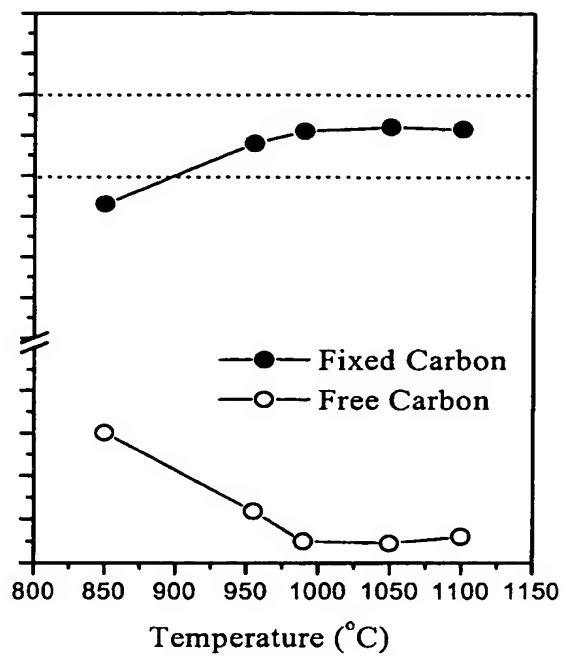


FIG. 4

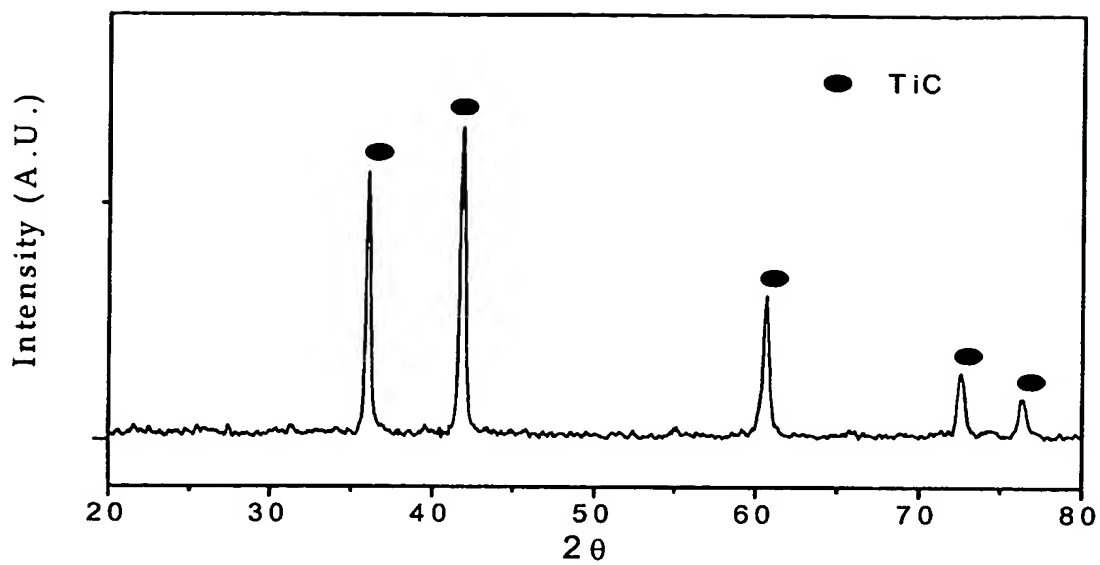


FIG. 5A



FIG. 5B



FIG. 5C



FIG. 6A

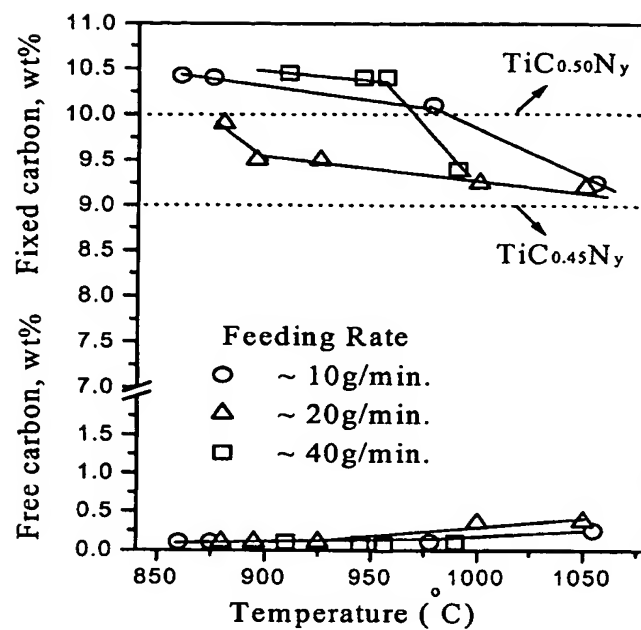


FIG. 6B

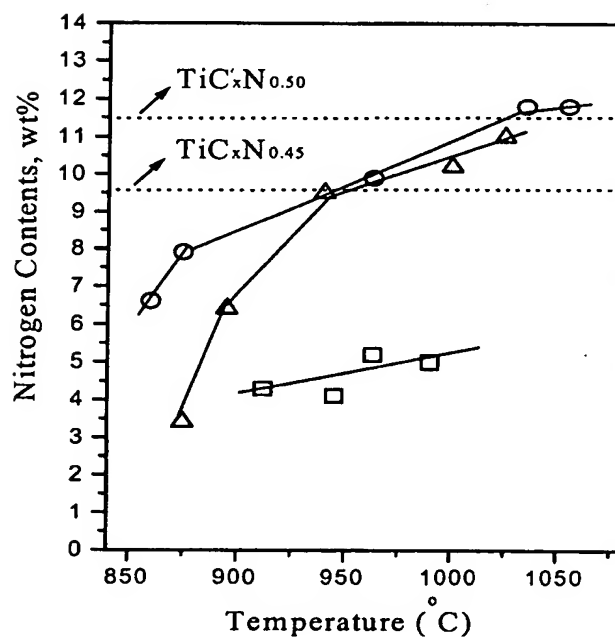


FIG. 7A

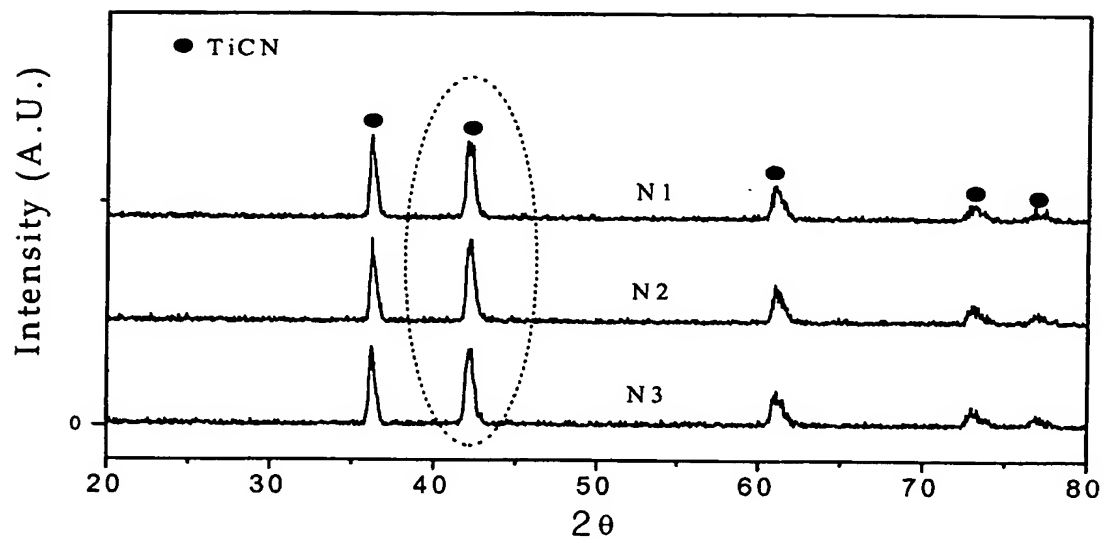


FIG. 7B

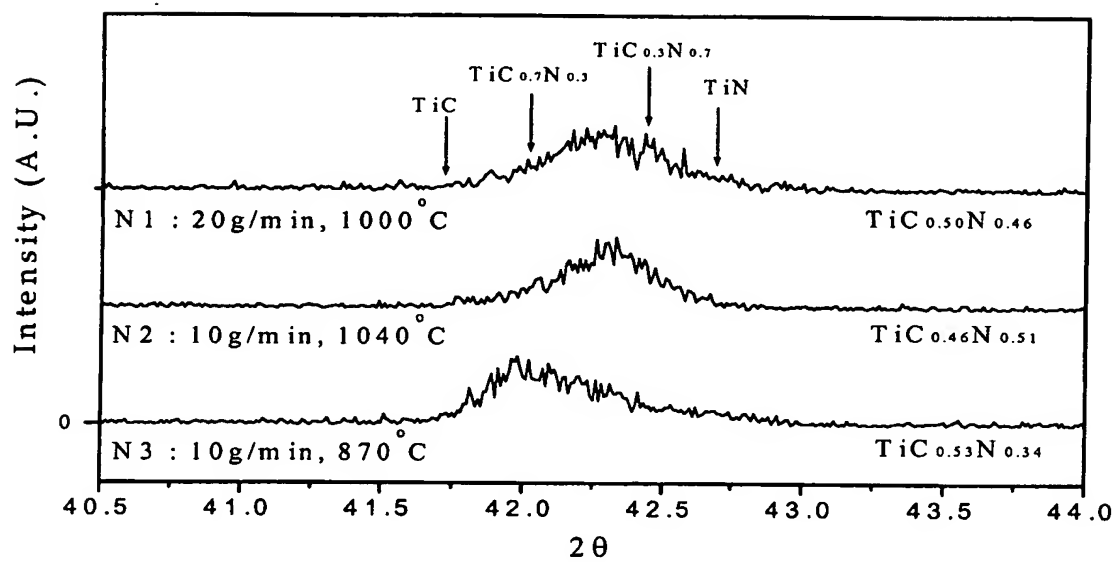


FIG. 8A

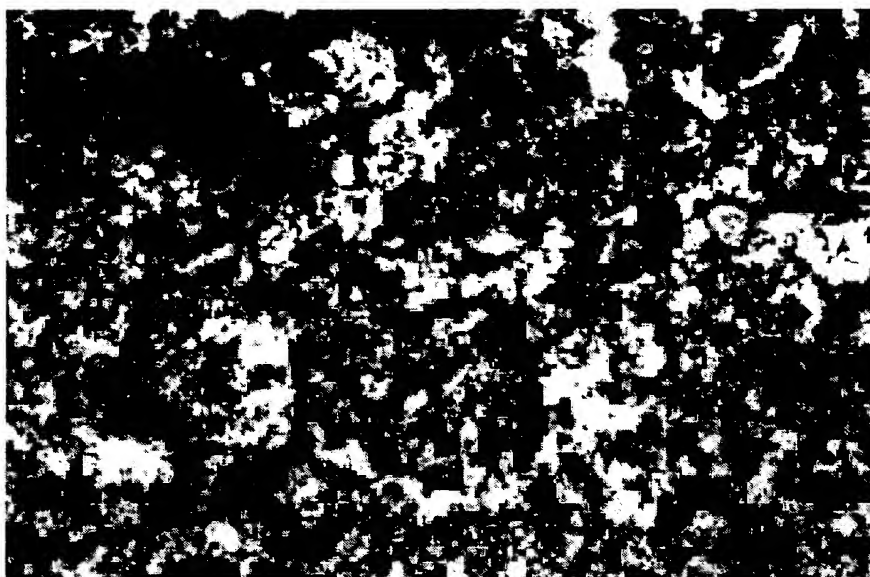


FIG. 8B





FIG. 9

Sample No.	Initial reducing agents	C			Fe	Mg	Cl	O	Ni	Ti	Form of TiC
		total	fix	free							
1	Mg-5%Ni	13.8	13.5	0.3	2.73	0.25	0.32	0.8	19.8	Bal.	TiC <sub>0.89</sub>
2	Mg-12%Ni	12.0	11.8	0.2	2.20	0.18	0.32	0.9	31.5	Bal.	TiC <sub>0.91</sub>
3	Mg-18%Ni	10.2	10.0	0.2	3.10	0.22	0.28	0.9	40.2	Bal.	TiC <sub>0.91</sub>
4	Mg-12%Co	11.8	11.3	0.5	2.80	0.15	0.15	0.6	35.3	Bal.	TiC <sub>0.92</sub>
5	Mg-12%Al	11.2	11.0	0.2	3.38	0.20	0.18	0.9	34.7	Bal.	TiC <sub>0.88</sub>
6	Mg-12%Ni	11.8	12.4	0.4	2.50	0.22	0.32	0.6	32.5	Bal.	TiC <sub>0.5</sub> N <sub>0.5</sub>
7	Mg-12%Co	12.1	12.3	0.4	2.60	0.24	0.18	0.6	34.4	Bal.	TiC <sub>0.5</sub> N <sub>0.5</sub>
8	Mg-12%Al	11.5	12.0	0.3	3.45	0.25	0.17	0.8	35.1	Bal.	TiC <sub>0.5</sub> N <sub>0.5</sub>

\* Sample Nos. 6 to 8 were maintained under inert atmosphere

FIG. 10A



FIG. 10B

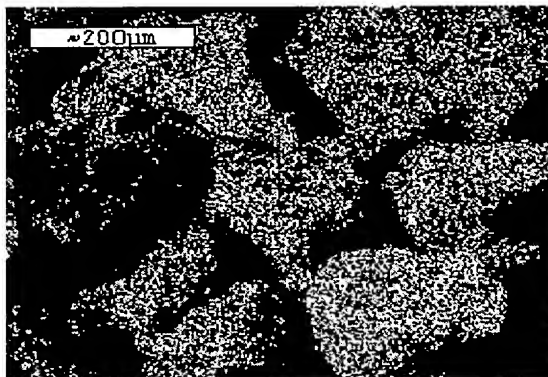


FIG. 10C

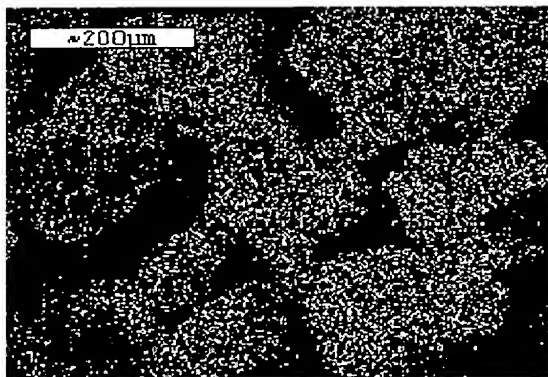


FIG. 11

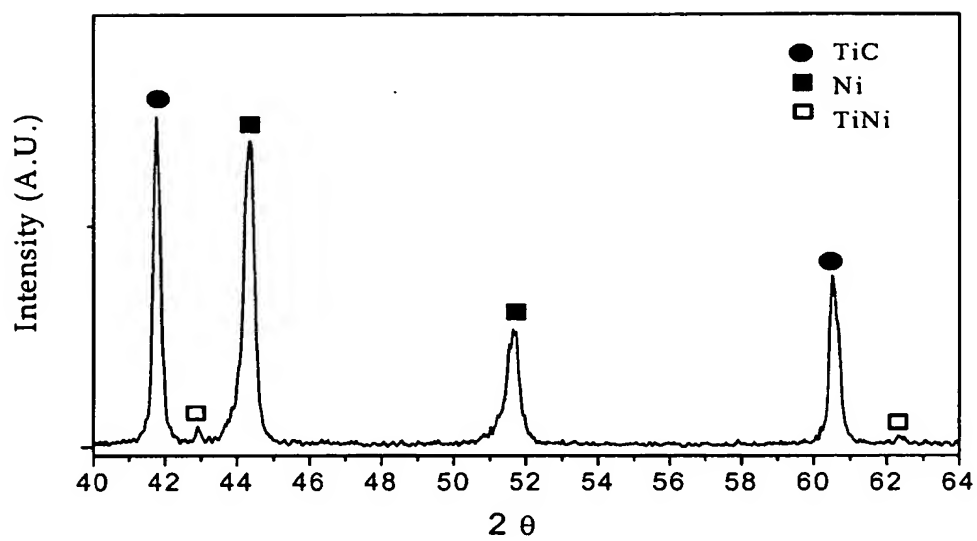


FIG. 12

